



Magazine

JUNE 1961

The *ICI Magazine*, price twopence, is published for the interest of all who work in ICI, and its contents are contributed largely by people in ICI. Edited by Sir Richard Keane, Bt., and printed at The Kynoch Press, Birmingham, it is published every month by Imperial Chemical Industries Limited, Imperial Chemical House, Millbank, London, S.W.1 (Phone: VICTORIA 4444). The editor is glad to consider articles and photographs for publication, and payment will be made for those accepted.



POINT of VIEW

FOOD AND SOCIAL CHANGE

By Mark Abrams

VOLUME 39 NUMBER 294

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Contributors



Norman Freeman was appointed head of the Investments Department in 1959. He is also head of the Insurance Department, managing director of IC Insurance Ltd., a trustee of all pension funds, and a visiting director of HOC Division. He joined ICI in 1946 from a Liverpool insurance company. His hobbies are writing (author of "Civil Aviation and the Export Trade" and other aviation works) and golf.



Desmond Haslett says he can't keep away from water. His hobbies are the Navy, sailing and fishing. He joined ICI in 1939 as a production trainee with General Chemicals but left shortly afterwards to join the Navy. With the rank of lieutenant commander he returned to ICI as an outside representative for chemicals in Northern Ireland. He is now assistant to the regional sales manager for plastics and organic chemicals (Scotland and Northern Ireland Region).

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FRONT COVER: Richmond Park. Photo by E. Evans (Intelligence Dept., Head Office)
(Taken with Voigtlander Vito II, Kodachrome film, 1/50 sec. at f4)



IN spite of anything we ourselves may say to the contrary, most visitors to this country are convinced that the British people are divided into various social classes, and that between these classes there are real differences of speech, dress, education, political outlook and leisure interests. Only a handful of these outside observers are likely to extend this analysis and point out that in addition there are sharp differences in diet between the social classes. Middle class housewives and working class housewives may do their buying at the same grocery shops, but when they come out their shopping bags will contain very different collections of foods. And these differences will not be because they are spending different amounts of money.

THERE are sufficient official statistics to make possible highly reliable estimates of food expenditure. In 1960 the wife of the average white-collar worker (about one-third of all households in the country) with a family of four to look after (herself, husband and two children) spent about £6 2s. 6d. a week on food. In the same year the wife of the average manual worker (roughly two-thirds of all households) also with a family of four spent £5 17s. 6d. a week on food. There was a difference of only five shillings between them.

But they gave their families very different meals. Comparing the two main types of household—middle class and working class—the latter ate much larger quantities of potatoes, tinned beans, bread and margarine; at the same time, compared with middle class families, they ate appreciably less fruit, eggs, milk, butter and fresh green vegetables.

EXPERTS are unanimous that nutritionally the middle class diet is the better of the two, and certainly most of them would feel that it is the more attractive. According to them, in a more sensible world, working class people would be eating the same foods that middle class people do. The advice of the experts is buttressed by Government policy which, through subsidies, reduces considerably the price of such typical middle class foods as milk, eggs and butter. Further encouragement comes from commercial sources which each year spend millions of pounds on advertisements trying to persuade working class housewives to spend a larger share of their housekeeping money on all these subsidised foods and also on fresh fruit.

But despite all these pressures nothing much seems to happen. The contrast between middle class meals and working class meals persists, and the gap between them diminishes at only a snail's pace. Here is one area of life where, clearly, everyday habits and

preferences have a stability that must discourage even the most patient reformer. It is a stability that reminds us that usually middle-aged men and women are not prepared to change their ways, and that for the most part social change, if it comes peacefully, is a slow business. It can be brought about most easily not by asking people in their forties and fifties to abandon old habits and learn new ones, but rather by shaping the opinions and attitudes of young people.

THIS, in fact, is what seems to be happening with food consumption. Most middle-aged working class housewives simply use their increasing prosperity to buy larger quantities of the foods they liked in their less prosperous years. It is for the most part only young working class mothers who provide their children with the sort of meals and foods that have long been customary in middle class homes. In the food markets we have a good illustration of something that is increasingly true of modern Britain; in a fast-changing world differences in age are becoming more important and more striking than differences in social class. This may often be very irritating for those of us already in the second half of our allotted span of three score years and ten, but I, for one, feel that on balance it is an improvement.

The opinions expressed in this article are not necessarily those of the Company

£9,700,000 SURPLUS IN ICI WORKERS' PENSION FUND LEADS TO



Mr. N. J. Freeman, Head of ICI Investments Department

The Head of ICI's Investments
Department answers a quiz by the
Editor on the policy which brought
about these gains.

MR. S. P. Chambers' statement at last month's Central Council meeting that the Company proposes to use the Workers' Pension Fund actuarial surplus of £9.7 million solely for the purpose of increased benefits, renouncing its right to reduce its own contribution, received warm approval on all sides. After the meeting was over I sought out Mr. N. J. Freeman, head of ICI Investments Department, in order to discuss with him the investment policy which has led to this very large surplus. Our conversation went like this:

EDITOR: These words "actuarial surplus"—I am not quite clear what they mean. But before I ask you to explain what an actuarial surplus is, could you say what part is played in arriving at this surplus by the rise in market value of Pension Funds?

FREEMAN: The last Workers' Pension Fund accounts show that the market values of investments exceeded the original cost of those investments by over £10 million. Now do not run away with the idea that just because of this the Fund has all that money to give away. Market values can vary greatly from time to

HIGHER PENSIONS

time and for various reasons, but what we are chiefly concerned with is the growth of Fund income, although of course we do keep constant watch over the security of the capital involved.

Higher market values are of practical importance and benefit in so far as they are usually a reflection of higher dividends and greater income.

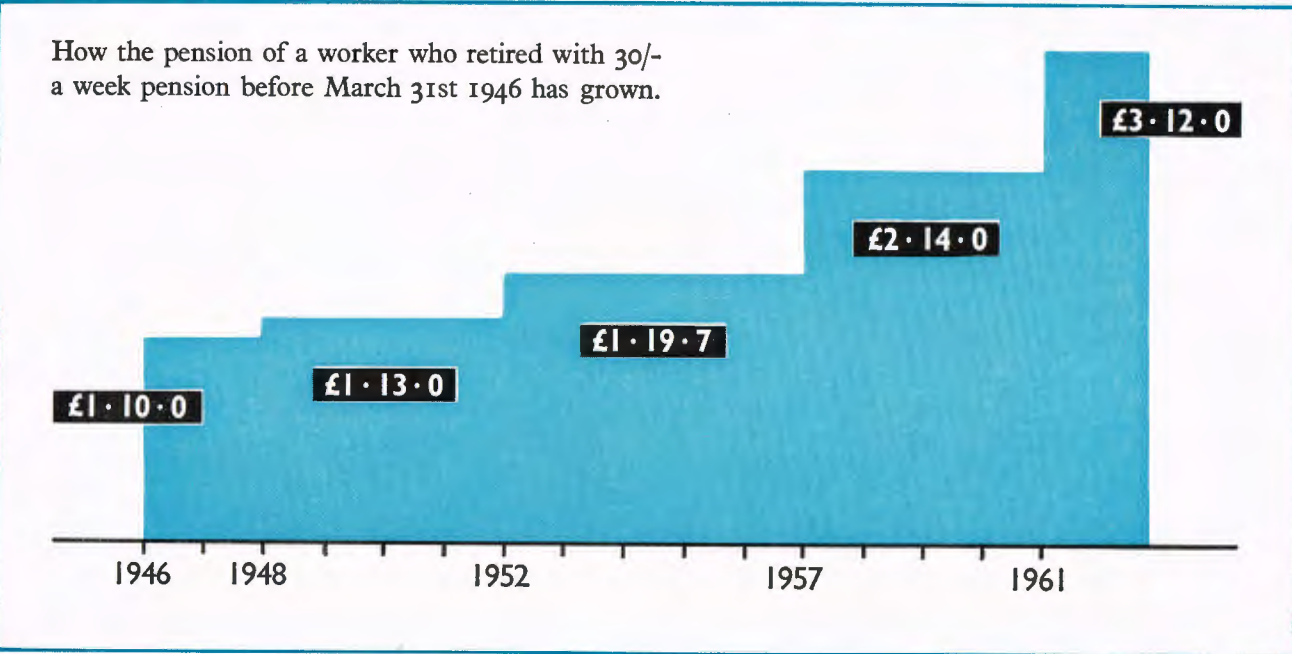
EDITOR: In other words, when a Company in which you have invested raises its dividend, you are not primarily interested in the higher market value of the shares resulting from this, but rather in the fact that you are now getting a better return—a higher rate of interest—from the capital originally put in.

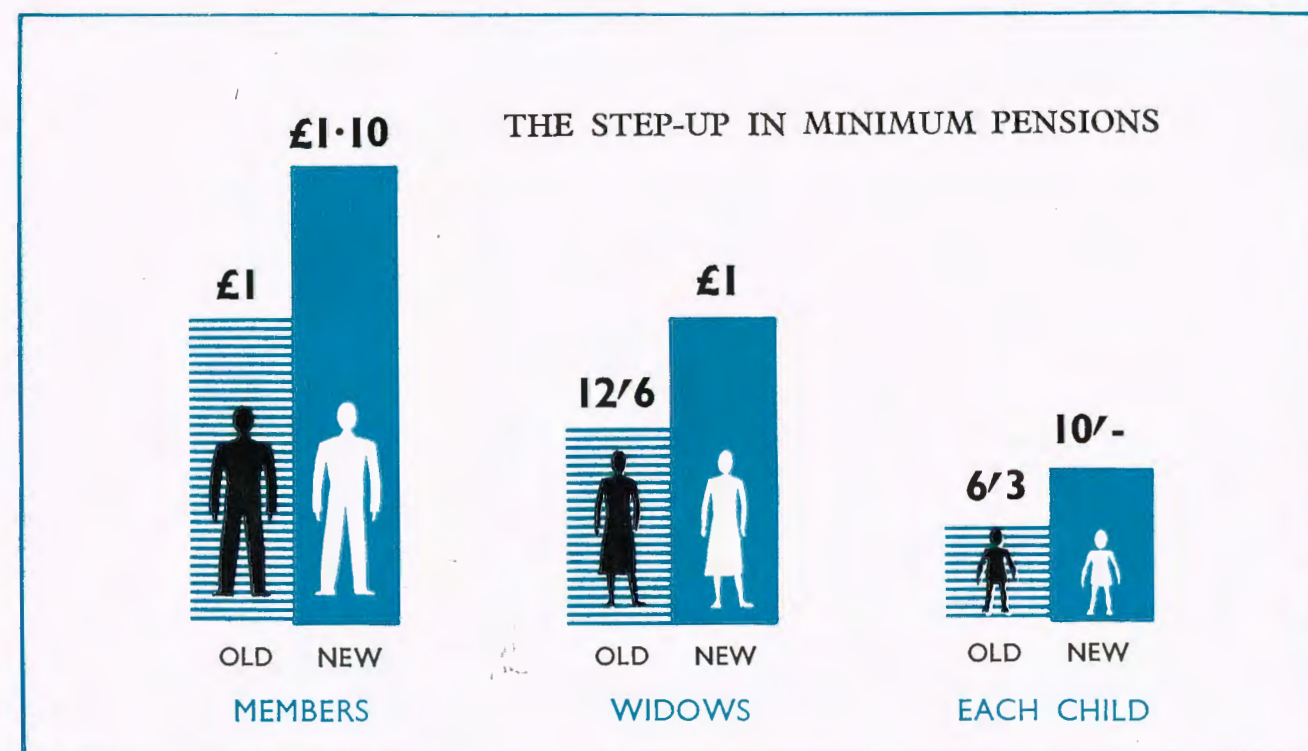
FREEMAN: Precisely.

EDITOR: Can you therefore say how the rate of interest earned by the Workers' Pension Fund has in fact improved during the four years since the last valuation?

FREEMAN: It has risen from £4 16s. 1d. earned on every £100 invested as at March 1956 to £5 17s. 1d. on every £100 invested as at March 1960. This is a rise of nearly 25%, which we regard as very satisfactory.

EDITOR: I imagine much of this is due to a policy of investing in equities, that is to say, investing in the ordinary shares of industrial and commercial companies. I believe the traditional investment for pension funds used





to be fixed-interest Government securities, known as gilt-edged. Can you elaborate on this aspect?

FREEMAN: The Trustees began investing in equities soon after the last war, recognising that by sharing in the fortunes of industry in this way they might both provide against falls in the value of money and also share in growth and expansion of business. Equities are not fixed interest stocks and only rank for interest or dividend payment after other prior charges in the Company concerned have been met (such as fixed interest debenture and preference or loan stocks). The more left over after dealing with prior charges the greater the benefits for the ordinary shareholder. There are risks involved in selecting ordinary shares as investments, of course, but in the Workers' Pension Fund ordinary shares show an average income return more than half as much again as fixed interest stocks and so have been very valuable. The tempo of our purchases of equities has been greatly speeded up in recent years and indeed between the last two actuarial valuations total investment in equities for the Fund increased by well over 50%. During this period Mr. Chambers, then an ICI deputy chairman, devoted a good deal of time to investment matters, Mr. David Robarts, an ICI non-executive director (chairman of the National

Provincial Bank), was appointed chairman of the Investment Committee, and a new, fairly large and separate Investments Department was established at Head Office. Mr. Robarts in particular still devotes a lot of time and attention to Pension Funds investment matters.

EDITOR: Can you tell me what proportion of the Workers' Pension Fund is invested in equities today?

FREEMAN: About 40% of the total Fund is now in equities, and we have made a substantial start also in property investment. These investments are rising continuously. About one-fifth of the total investment in equities is now invested in ICI shares, which of course have proved outstandingly successful.

EDITOR: Why property?

FREEMAN: We made a brief announcement about our property interests a year or so ago, when the fact that we have some business connections with Mr. Jack Cotton was revealed. Naturally I cannot disclose exactly how much we have in property or say what our other interests apart from Mr. Jack Cotton's connections are. But I can say that we believe that our property interests—which will not be confined to the UK alone—will prove very successful in the long run. Property, and by this you may take it that it is

invariably office and shop property, combines the advantages to us of a good rate of interest from the commencement with the prospect of increased income and values as time goes on; and that, as I have explained earlier, is the objective of all our efforts.

In these respects, of course, property has similar qualities to ordinary shares; but today, owing to the ever-widening interest in ordinary shares, lower initial yields are being obtained on equities and it is only when the dividends have grown to a point where good interest rates are being earned that the original investment in equities justifies the investment. With property we get good return from the outset.

EDITOR: How does the ICI Workers' Pension Fund compare with other pension funds?

FREEMAN: I would say it compares very favourably with any other fund. I am aware of only one other large fund which has followed a higher rate of investment in equities than ours, and therefore shows a better overall return.

EDITOR: So far I have asked you chiefly about investment policy. But, of course, there are a lot of other factors to take into consideration in calculating an actuarial surplus. Can you sketch briefly what these factors are?

FREEMAN: On the one hand you have your estimated value of future income, on the other hand the estimated value of future liabilities. The difference between the two is the actuarial surplus.

The calculation of future liabilities is affected by such considerations as the expectation of life (which, incidentally, appears to be still slowly rising), future wage levels, and possible early retirements and withdrawals from the Fund. Altogether, as the members

gathered from the Actuary's address at Central Council last year, it is a highly complicated and technical task.

EDITOR: One final question. I notice that the actuarial surplus of £9.7 million was calculated as at March 31st 1960. How have the funds improved since then?

FREEMAN: I am glad to be able to say that the

Fund is still improving its rate of income and we must hope that this will continue. Certainly the Trustees through their Investment Committee and the Investments Department, are doing their best to maintain a good rate of growth. Incidentally I should mention of course that the Workers' Fund is only one of several ICI pension funds, the grand total market value of which is now in the region of £150 million.

This conversation was held against the background of the Personnel Director's statement on the new pension benefits.

* * *

I would like first to remind you (said Mr. C. M. Wright) that pensions in the Workers' Pension Fund are calculated directly by reference to the employee's contributions. Contributions are in turn directly related to wages, being, as you will remember, 2½% or 6d. in

the £, and from this it follows that the pensions themselves are directly related to wages earned throughout service. The pension per year is two-fifths of the total contributions so that if an employee at retirement had contributed £375 his pension would be £150 a year, or just under £3 a week.

If the contributions paid some years ago, when wage levels were lower than today, are increased in value it means that the pension earned in respect of earlier service is stepped up and is, in effect, related to higher wages than those actually paid at the time. The major improvement

I N B R I E F

The improvements to the Fund from 1st May 1961 will be:

1. In place of the present increases, in calculating pensions and Death Benefits 6 and 7, the value of contributions paid or credited on or before 31st March 1951 will be increased by 100%, and the value of those paid or credited between 1st April 1951 and 31st March 1960 will be increased by 15%.
2. The minimum pensions will be increased to 30s a week for members with corresponding increases for widows and children.
3. Children's pensions will be increased to 20% of the full pension for one child under 18, 30% for two, 40% for three, and 50% for four or more.
4. Dependants' pensions will be paid on death in service after two or more years' pensionable service, in place of 10 or more years.
5. Part-time employees will be admitted to the Fund.

which is being made is designed to do this by increasing pension credits for past service by a further substantial amount.

There have been three pension increases in the past, in 1948, 1952 and 1957, and the position now is that the value of contributions paid or credited on or before 31st March 1946 is increased by 50%, and the value of those paid or credited between 1st April 1946 and 31st March 1951 is increased by 10%. It is now proposed to replace these increases for the purpose of calculating present and future pensions (and Death Benefits 6 and 7) by the following:

- (i) The value of contributions paid or credited on or before 31st March 1951 will be increased by 100%.
- (ii) The value of contributions paid or credited between 1st April 1951 and 31st March 1960 will be increased by 15%.

This will apply equally to those on pension and to contributing members of the Fund with service before 31st March 1960, so that all who were in the Fund at the date of the valuation will receive some increase in their credits and will absorb a very large proportion of the actuarial surplus.

An Example

These matters are rather complicated and so perhaps it will help if I give an example. Let us take the case of one of our older pensioners who retired at any time up to 31st March 1946 (and many of them are of course still with us)

having a pension at that time of £1 10s. a week. As I have said, pensions have already been increased three times, and this man will now be receiving a pension of £2 14s. a week. The new increases mean that his pension will go up from 1st May 1961 to £3 12s. a week, an increase in his present pension of 18s. a week.

All pensioners who retired up to the end of March 1946 will receive an increase of 33 1/3% in their present pensions, except for those receiving the minimum pension. The extent of the percentage increases for those who have retired since that date and for retirements in the future will depend in each case on the value of contributions before 31st March 1951 and between 1st April 1951 and 31st March 1960.

The increases in the value of contributions will also apply for the purpose of calculating widows' and children's pensions.

Prior Consideration

In its consideration of the disposal of the surplus the Company felt that as far as practicable prior consideration should be given to those employees of long service whose pensions are based wholly or partly on wage levels which are small in relation to present-day standards.

The Company has also decided that the minimum pensions will be increased from £1 a week to 30s. a week for members. The minimum total pension for a widow and children will be increased from 12s. 6d. a week for a

widow plus 6s. 3d. a week for each child to £1 a week for a widow plus 10s. a week for each child, subject, however, as in the past, to the total not exceeding the member's pension.

New Rates in November

Owing to the large number of pensioners concerned it will be some time before the pension increase can be put into effect for them. The procedure will be that existing pensions will be paid at the new rates from the beginning of November 1961, with 6 months' arrears of the increase to 1st May 1961.

There are two other improvements affecting the future rather than the past which the Company proposes to make and which represent improvements to the Fund where they are most needed.

Firstly, subject to the minimum pensions already mentioned, where children's pensions are payable these total one-sixth of the full pension irrespective of the number of children. While it would obviously not be right for the total pension payable to the widow and children to exceed the amount of the full pension, we think that an alteration can be made to improve in particular the position of larger families where the father has died. It is proposed that in the case of deaths of members (including pensioners but not widows) occurring on or after 1st May 1961, where children's pensions are payable the scale should be (in addition to the widow's pension of 50%):

One child under 18	..	20% of the full pension
Two children under 18	..	30% of the full pension
Three children under 18	..	40% of the full pension
Four or more children under 18	..	50% of the full pension

Pensions for Dependants

Secondly, at present when a male contributing member of the Fund with more than 10 years' pensionable service dies leaving dependants (that is a widow or children), pensions are payable to the dependants. If he has less than 10 years' pensionable service cash benefits consisting of his contributions, plus interest (Benefit 9), are paid to his estate and a similar amount goes to the dependants (Benefit 11A, which was introduced in 1957). It has now been decided, in respect of deaths in service occurring on or after 1st May 1961, that, in place of the cash benefits, pensions will be paid to dependants in the event of death after 2 years' or more pensionable service (in place of 10 years or more), provided that the member could have completed 10 years' pensionable service if he had lived to normal retirement age. The minimum pension will apply and it is thought that this will be a considerable help to widows and children of those who die after short periods of

service with the Company. The cash Benefits 9 and 11A will in future only be paid if the member had less than 2 years' pensionable service at the date of death or could not have completed 10 years.

Finally, the Company was asked in the resolution which was passed at the May 1959 meeting of the Council to consider the feasibility of making some sort of pension arrangements for part-time employees of the Company. In the first place it has been decided that the rules of the Fund should be altered to provide that for future entrants to the Fund the minimum pensions should not apply to members with less than 10 years' aggregate pensionable service on the full-time payroll. This will remove the main obstacle to the admission of part-time employees to the Fund and they will be allowed to join the Fund if they wish to do so at any time within 3 months of engagement. For existing part-time employees the option to join will be open until Friday, 25th August, and membership will commence from Monday, 28th August. The part-time employees concerned will not subsequently be allowed to change their minds.

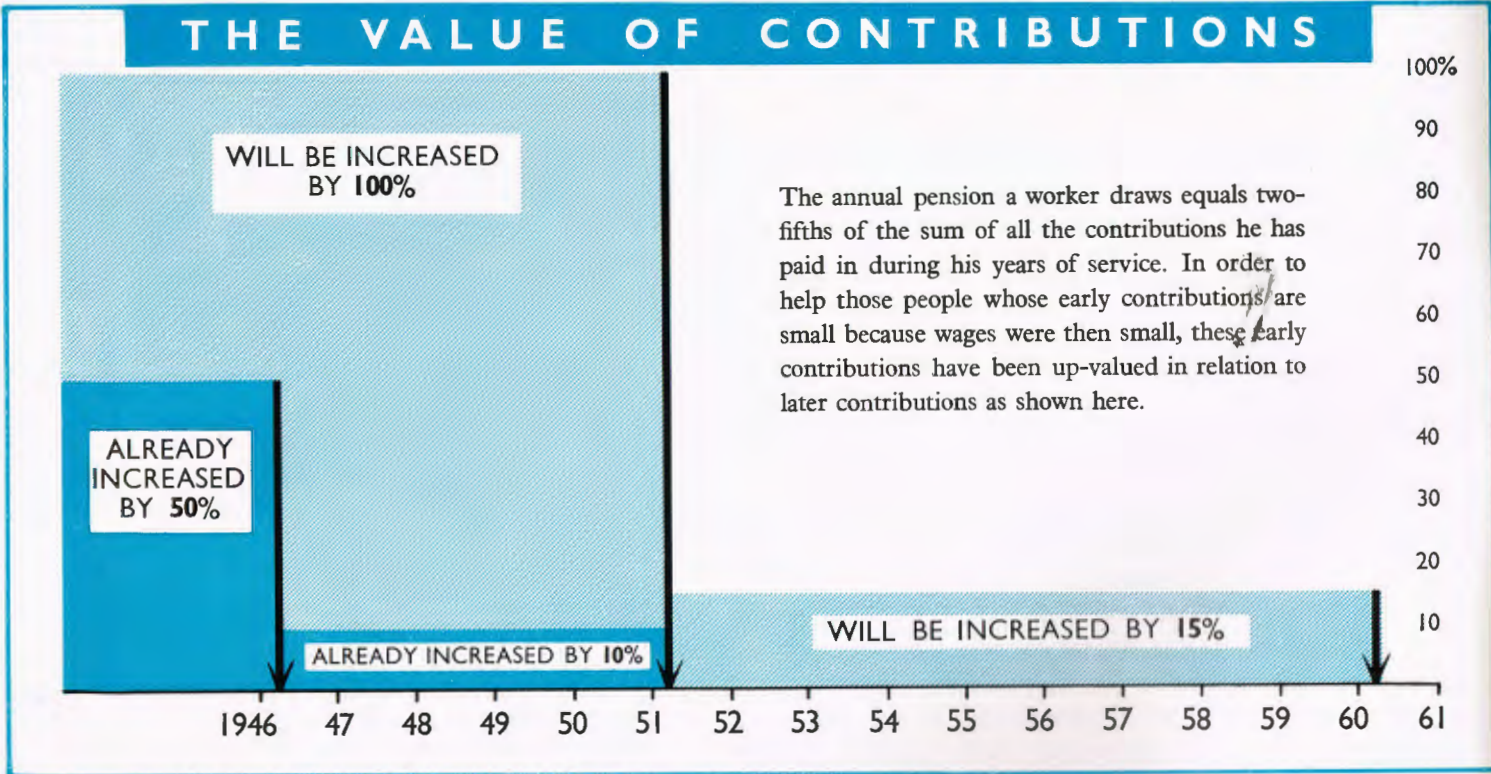
Conditions for Part-timers

If they join they will receive credit for the full amount of their last continuous period of part-time service. This credit will apply for the purpose of calculating pensionable service and pensions only and will not be payable as part of a cash benefit. It is difficult to estimate what this will cost because we do not know how many part-time employees will join the Fund, but a small part of the surplus has been allocated for this purpose. The cost may be greater than the amount allocated and if so it will have to be borne by the Fund. I hope that many part-time employees will take advantage of this offer when it is made to them shortly.

The above improvements, including the granting of back service to part-time employees who join the Fund, will absorb the whole of the surplus of £9,700,000.

A Question of Priorities

The Company has not been able to accept the resolution passed at the last meeting of the Council asking that the widow's pension should be reduced at the end of the 5-year period in which the full pension is paid to 70% instead of 50% of the full pension. While we have sympathy with the suggestion, we feel that it is a question of priorities and that it is more important to improve all pensions, including those paid to widows, rather than those of widows only, particularly when it is appreciated that more than half the surplus of £9,700,000 would have been needed to meet this suggestion.



People and events . . .

A "Times" Survey of ICI

AT the end of last month ICI made newspaper history by being the first public company to have one of *The Times*' famous surveys devoted exclusively to its activities. *The Times* review of ICI ran to 24 pages—something over 40,000 words of print—and the articles were written for the most part by a team of *The Times* staff writers. There were also a number of distinguished outside contributors. Sir Simon Marks of Marks and Spencer Ltd. wrote about ICI from the customer's point of view; a high-level trade unionist discussed ICI's labour relations, and Sir Alexander Todd, the Nobel Prize Winner, wrote on the Company's own research achievements and its support of research in the universities.

A picture of the ICI Board taken specially for the review by a *Times* photographer appears on page 200. There is only one absentee, **Mr. P. C. Allen**, a non-executive director and president of CIL.

Flying Visit

WITHIN two months of ICI announcing its intention to erect chemical plants near Rotterdam, a party which included a Dutch burgomaster and Rotterdam Port and Electricity Supply officials paid what was literally a flying visit to Wilton in April.

The party, headed by Burgomaster J. C. Aschoff of Rozenburg, and Mr. F. Posthuma of the Rotterdam Port Authority, flew to Woolsington Airport, Newcastle, on 18th April and spent the next day seeing as much as possible in the time available of Wilton, its plants and services.

Their visit was by invitation of ICI with the idea that by seeing Wilton, with its various Divisional connections, the visitors—who are particularly keen to know what sort of

development to expect—would learn something about ICI as a company and would be able to see for themselves what chemical production can mean in terms of buildings, plant and services and relationship with communities in and around the factory.

The visitors, who were accompanied by two members of ICI's European Council, **Dr. S. B. Cormack** and **Mr. B. R. Goodfellow**, were welcomed to Wilton by **Mr. J. C. H. McEntee**, chairman of the Wilton Council, and during the tour of the works inspected the power station, the workshops, and the training centre, as well as the Olefine and 'Butakon' plants. They also visited Teesport, where the raw materials are brought in by ocean-going tanker to feed the three oil crackers.

Safety Records

FOR last year as a whole ICI's accident frequency rate was 0.43—the best year to date in the Company's history—and the rate for the first quarter of this year fell even further to 0.38. However, when he commented on these achievements at Central Council last month **Mr. J. B. Doyle**, head of Safety Department, was cautious with his praise. "Progress is still slow, and there is a great deal to do before we achieve our target frequency rate of 0.25," he said.

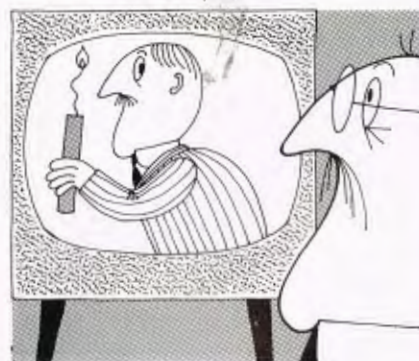
He went on to speak about the safety campaigns planned for this year. The first—extra safety training—was in

progress as he spoke. The second campaign will deal with fire prevention. It will take place, appropriately enough, in early November and will be run in connection with a national fire prevention week.

Mr. Doyle then told Council that the Castner-Kellner works of General Chemicals Division had succeeded in establishing a record accident-free run of over 5 million hours—this was a fine performance. He also commented on the fact that the Magadi Soda Co. had worked for more than a million hours without an accident—a remarkable achievement under the relatively difficult conditions in Africa.

Twenty Years After

WHEN **Mr. David Faulds**, a retired Nobel Division technical service demonstrator, settled down one evening a few weeks ago to watch BBC television he did not expect the surprise in store. The programme he watched was Cliff Micheltore's "Tonight," and one of the items showed the Crystal Palace in its glory, with fireworks decorating the evening sky.



Then followed the devastating fire that destroyed this most magnificent of glass houses, and as the film went on the surprise for Mr. Faulds developed.

Following the fire only the 280 ft. tall north tower remained standing. After the start of the war it was thought that this tall tower provided a gratuitous landmark to enemy bombers, so it had to be demolished. This job was done on 16th April 1941.

Shots of the demolition operation were included in the "Tonight" film. David Faulds saw himself, twenty years younger, preparing and placing one of the charges. Two other ICI men, the late Mr. J. Lorimer and **Mr. Bert Couzens**, were also involved in the demolition.

And just for the fun of it "Tonight" put the tower up again, to bring it down in slow motion. Easy when you know how on film!

Moscow Incident

STELLA Grove, the pretty model girl who appeared on our front cover last month, ran into a spot of trouble in Moscow recently.

Stella, who was in Russia to model 'Terylene' fashions at a special pre-Fair show organised by Fibres Division, was "borrowed" from Fibres Division by Miss Jill Butterfield of the *Daily Express*. Miss Butterfield wanted pictures of 'Terylene' clothes against a colourful Moscow background for her paper and chose for setting Moscow's picturesque but ramshackle Central Market. As Stella Grove posed for the picture and Russian shoppers admired her dress, a man in the crowd objected and a rumpus threatened. However, a cheery Russian policeman came to their rescue and ordered the man to clear off.

Soon everyone was smiling again, and some of the Russian onlookers who had cameras even joined in and took their own pictures.

New Indian Subsidiary

CHEMICALS and Fibres of India Ltd., a new ICI company, was registered in Bombay in April with an authorised capital of Rs10 crores (about £7½ million). It will be a public company in which the Indian public will be invited to participate in due course. The company has been

formed to take care of ICI manufacturing projects intended for the west coast of India. Negotiations are in progress for the acquisition of a large site near Bombay.

An announcement from ICI (India) says that it is expected that the new company will manufacture a wide variety of chemicals and related products which will make available to Indian industries raw materials which have had to be imported hitherto, as well as new materials which have not been available in India in adequate quantities so far.

Its board of directors includes two well-known Indian industrialists, Mr. Neville Wadia, chairman of Bombay Dyeing and other companies, and Sir Raghavan Pillai, until recently a high-ranking official of the Indian Civil Service and currently managing director of Martin Burn.



Mr. Eastaway (left) and Mr. Williams

IN BRIEF

Festival Film. *Eye to the Future*, a new recruitment film made for the ICI Engineering Panel, is one of 15 films, out of over 80 submitted, selected to form part of the British entry at the forthcoming Turin film festival. It has been made by the ICI Film Unit and shot on location at Cambridge, Billingham and Wilton.

Down Our Way. The BBC sound programme "Down Your Way" with interviewer Franklin Engelmann visited Wilton Castle last month to speak to "Mr. Wilton"—Mr. O. P. Grenfell, reception officer. The four-minute recorded interview was one of nine which Mr. Engelmann made during the day in and around Redcar for inclusion in the broadcast on 7th May.

ICIENZ Computer. ICIENZ are to install a £40,000 electronic computer at their Central Research Laboratories. The machine, a Ferranti Sirius, will be the first technical computer bought by an industrial organisation in Australia.

Capri Holiday Prize. Miss Shirley Alcock and Miss Muriel Whitehead (Pharmaceuticals Division) have won themselves a 15-day holiday in Capri in a car treasure hunt for which competitors came from all over Lancashire and Cheshire. Miss Alcock is a slide reader in the Histopathology Section at Alderley Park and Miss Whitehead a lab assistant.

Bravery Award. Mr. Thomas Strachan, 43-year-old instrument designer at Billingham, was one of two men who were presented at West Hartlepool Town Hall on 6th April with Royal Humane Society testimonials for bravery in saving a man from drowning at Seaton Carew last August.

Small World

A CHANCE remark in a conversation between an electrician at the Warrington Works of Alkali Division, 41-year-old **Herbert Williams**, and a member of his management has

ICI at French Air Show. Metals Division is exhibiting for the first time at the Salon International de l'Aéronautique—France's Farnborough—now in progress at Le Bourget, Paris.

Gardens on View. Some 2400 people visited Warren House on 7th May which was thrown open to the public under the Gardeners' Sunday Scheme. As a result £132 has been sent to gardening charities.

Royal Wedding. Mr. A. Bulmer (Billingham Division) has been invited to the wedding of the Duke of Kent at York Minster. He is invited as representative of the Civil Defence unit at Thornaby, Yorkshire, where he is chief warden.

European Cup Referee. Mr. Kevin Howley (Billingham Division), who last year made history as the youngest referee ever to control an FA Cup Final, was appointed to take charge of the European Cup semi-final in Lisbon on 26th April, between Benfica (Portugal) and Rapide (Vienna).

Mr. Jack Thompson (Billingham Division), who is Stockton district chairman for the National Orthopaedic Society and a member of the Society's national executive council, was among Tees-side representatives who attended the recent opening by the Queen Mother of the Society's new women's hospital in London.

Mr. Bob Richardson of Ardeer Factory was a member of the Scottish team that took part in the annual quadrangular fencing international with England, Ireland and Wales in London last month. England, winners of the event since it was first held in 1950, again finished first, with Scotland in second place.

resulted in the re-establishment of a friendship that began 19 years ago in a Japanese prisoner of war camp. Mr. Williams discovered just what a small world it is when he began talking to **Mr. W. J. Eastaway**, deputy head maintenance engineer at Winnington, about the latter's home town of Sydney, Australia.

He told Mr. Eastaway of his friendship with a Sydney-born Australian, a fellow prisoner of war in the Japanese camp at Serrangoon Road, Singapore. He remembered the address of his friend's family and was surprised to find that Mr. Eastaway's parents lived in the next street. Mr. Williams explained that he had never written to the family of his friend because after they had been sent to separate camps he had been told unofficially that the Australian was among the victims of a wave of disease that wiped out 4000 prisoners in the one camp.

Mr. Eastaway, intrigued by the coincidence, wrote to his parents for news of the fate of the Australian—Bob Ingleton. The reply came back that the chum whom Mr. Williams had believed dead was alive and well, and happily married with two children. Since then, the two men have exchanged several letters and cards.

A common love of motor cycling brought them together in the first place, plus an interest in each other's country. This way the two men spent many hours talking together after the working day in the camp was over.

After three months at Serrangoon Road they were sent to their separate camps. Mr. Williams went first to Changi and then to Siam to work on the Bangkok-Rangoon Railway.

He returned to England at the end of the war and married a girl from the Tracing Office at Winnington before joining Alkali Division himself.

Smethwick Works to Close

PAINTS Division announced last month its intention to close its Smethwick Works. The Works is on the outskirts of Birmingham and employs 112 men and women. The date announced for the final closure of the Works is 31st March 1962, and the announcement has been made well in

advance so that employees can have the best possible chance of finding other suitable employment.

At the present time almost 90% of the Division's products are made at Slough and Stowmarket Works. Both these factories have been extensively modernised over the last few years and each can cope with considerably higher demands. In addition, there is space available at Stowmarket for further expansion, whereas the site at Smethwick is too small to allow large-scale production.

The history of Smethwick Works goes back to the old Frederick Crane Chemical Co. Frederick Crane was an American who started manufacture of "cold" lacquer for polished metal in a converted house at Newhall Hill, Birmingham, in 1887. This lacquer was known as Zapon, which, after many setbacks, eventually displaced to a large extent the old shellac "hot" lacquers used in many of the lacquer industries.

On the death of Crane the business was developed by Philip W. Marshall with the help of Herbert Hunt and J. R. Pearmain (whose son **R. C. Pearmain** is now the works manager). With the expansion of the business it became necessary to move to larger premises at Bordesley Green in 1912. Later the business was taken over by Nobel Industries Ltd. and became part of ICI after the 1926 merger.

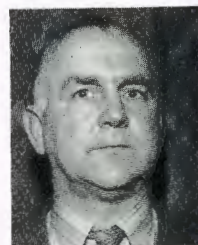
Further expansion took place, and the factory was moved from Bordesley Green to its present site in 1936. The surrounding walls are said to have been built by prisoners of the Napoleonic war from the local Winsongreen gaol, hence the old name "French Walls Works."

Athletics' Honour

ONE of the top jobs in athletics in the North has come the way of a Billingham man, **Mr. Frank Trotter**, currently training as a process superintendent on Ammonia Works. It is the presidency of the Northern Counties Athletics Association.

He is the first president from the North Yorkshire-South Durham area, and for the next twelve months he will head the Northern Counties Com-

mittee which controls the activities of more than 400 amateur athletics clubs from Derbyshire to the Scottish border. His election means that he will also serve on the national executive committee of the AAA.



Mr. Trotter

Mr. Trotter has been interested in athletics since his schooldays. He became involved with the organisation of athletics only after the last war, when he was persuaded to take over as secretary of Billingham Synthonia Athletic Section.

He has served on the executive of the Northern Counties Cross-Country Association and was one of the first members of the special committee formed by the Northern Counties AA to operate a coaching scheme. As a grade one track judge he is personally qualified to judge at international meetings.

APPOINTMENTS

Some recent appointments in ICI are: **Billingham Division:** Mr. J. B. Doyle, Engineering Works Manager; Mr. R. J. B. Partridge, Supply Manager; Mr. J. B. Robertson, Commercial Director (in Addition to Mr. R. W. Pennock). **Dyestuffs Division:** Mr. R. E. Godwin, Staff Manager. **European Council:** Mr. G. W. Gibbins, head of Development Department. **Fibres Division:** Dr. W. E. Tetlow, Works Manager Designate of Kilroot "Terylene" plant. **General Chemicals Division:** Mr. W. Johnstone, Commercial Director of Plant Protection Ltd. **Heavy Organic Chemicals Division:** Mr. R. Malpas, Engineering Manager. **Metals Division:** Mr. J. R. H. Crane, Director in charge of the Copper Products Group; Mr. T. H. Gallie, Overseas Director. **Nobel Division:** Dr. J. Gillies, Manager, Dumfries Factory; Mr. E. Owen, Work Study Manager. **Scottish Agricultural Industries Ltd:** Dr. J. M. Holm, Director. **The Regions:** Mr. J. A. Collier, Sales Manager, Agricultural Department, Northern Region. **Wilton Council:** Mr. L. W. Jenkins, Construction Projects Manager. **ICI (India):** Mr. A. R. Foster, Chairman; Mr. C. A. Pitts, Managing Director (jointly with Mr. A. R. Foster and Mr. F. G. Lamont).

RETIREMENTS

Some recent announcements of senior staff retirements are: **Billingham Division:** Mr. P. N. Jackson, Supply Manager (retiring 31st August); Mr. T. C. Robinson, Engineering Works Manager (retiring 30th September). **Dyestuffs Division:** Mr. J. R. Maddocks, Staff Manager (retiring 31st October).

A headline on The Times city page "Polypropylene's Bright Future" above the news that ICI is doubling its polypropylene capacity inspired the Observer's Paul Jennings to verse.

Mr. C. L. Jenkins (Heavy Organic Chemicals Division) and his friend Mr. J. W. Saunders sent Mr. Jennings these words of warning which duly appeared in the Observer on 7th May.

Propylegomenon

It's April! I prime a poetical pen
To polish a paean of praise,
But pause—is a paean appropriate when
Perplexity plagues all our days?
When perils proliferate, problems appal,
Should a paean give place to a plaint,
A plangent complaint on the plight of us all,
A picture in poisonous paint?
For, peer at the planet from tropic to pole,
And the portents, it's perfectly plain,
Are poor for patrician, for peasant and prole,
Pale prospects of panic and pain—

But here's a pleasure unforeseen,
'Tis jolly polypropylene,
Promising to all of us
A future polyprosperous!
Proprietorially they preen
With polyprophecy serene,
Plump profits they prepare to pay
And proper pride comes into play
At plumpness in a period lean.
Perennial polypropylene!
O polymer to me unknown!
I've done no proper prep, I'll own,
But hear a poor pale pupil's plea
To know what propylene could be;
Pray, what properties are seen
By people primed on propylene?
Plainly, please, propound to me
Its polypracticality.
Does the product paint or clean
(Is there *monopropylene*?)
Part of plastics? Power for planes?
Pills to palliate our pains?
Where is polypropylene
Part and parcel of the scene?
Does it purge potato pest?
Is the product poured or pressed?

Let it pass. I'll never glean
The facts on polypropylene;
For only one fact's plain to me—
Its polypopularity.
But that's a fact that's bound to please,
That queues come after all those p's.

Polythalamion

or Words of Warning to Paul about Polly

How sad that Jennings in this silly season
Should fall for science against all reason.
Polypropylene's a lively lass,
But not for such as Paul to make a pass.
So, before his rapture tears him to a tatter,
Some straight advice to the lovelorn, out of Natta.
Before he swoons away at love's sweet feast,
He ought to know the nature of the beast.

First her ancestry: propylene
Belongs to the Family Olefin;
Plenty of cousins, so we are advised,
Poly-fied when duly polymerised;
Ethyl-, But- and Pent- and all those others,
Obviously her sisters and her brothers.

List her virtues: a noble thermoplastic,
Stereospecific and isotactic;
Light of heart, but strong with heat resistance,
Compression cannot change her sure persistence;
Without optical activity, it's true,
But stereoregular, and that's quite new;
Most interesting, now, her Vicat softening point,
With high strength in every joint;
Suitably antioxidised, we're told,
She's well protected from growing old.
A little apparent density, we'll admit,
And a dielectric constant to fit.
But these are nothing. We've really backed her
For her delightful dissipation factor;
Glossy enough for films, and what a blessing.
Resistant to environmental stressing;
Fast, of course, when dyed with the proper stuff,
And stands up well, praise be, when handled rough;
Her value's high at reversible deformation,
Rightly approached through sulphochlorination.
But she's hardly right for little men like Paul
—Sorry, old man, unkindest cut of all.
Only the big men with the proper lolly
Dare undertake the upkeep of our Polly.

A pity, really; she would make a splendid wife
For Jennings in almost every branch of life.
She's good with furniture and vacuum cleaners,
Lawn mowers, pipes, utensils, coffee grinders,
Ropes and shock absorbers, insulation too;
Everything from the hair drier to the shoe.
Spun, she achieves a gossamer denier,
Is it surprising then, you think, that many a
Man casts longing, covetous, ardent eyes
On such a ravishing, versatile, useful prize?

Soft, Jennings, then, stifle that lover's sigh
Lest you should rouse the anger of her icy eye.

A Visit to Russia

By S. P. Chambers, Chairman of ICI

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The outlook of a trained economist, the experience of a leading industrialist, intellectual curiosity and keen observation—these qualities combine to make Mr. S. P. Chambers' report on his recent visit to Russia more than usually penetrating.

TOWARDS the end of last year I paid a brief visit to the Soviet Union. I should say at once that impressions gained on so short a visit as mine can be unreliable, or even misleading, but the programme was intensive and the people I met were at pains to explain to me the workings of the system under which they live. Every courtesy was shown and I was warmly received everywhere I went.

One impression I gained was that the senior people, and most of the scientists, were of very high standard and, in particular, that the Ministers and Deputy Ministers were men of great capacity and understanding. These senior men were without exception cordial and very frank in the explanations which they gave. They are clearly aware of some of the difficulties of life in Russia today, and aware also that they will have additional problems to face in the organisation of industry and trade when there are more consumer goods available and when questions such as consumers' choice have to be faced more seriously than they are at present. Lower down the line standards of competence dropped sharply.

My main purpose was to find out the conditions in which those who sell our goods in the Soviet Union operate, the general lines upon which trade might be expanded, the attitude of the Soviet Union authorities to our Company and to our business, and generally to find out for myself about living conditions in the Soviet Union. I was also interested to find out, if I could, how the Soviet economic machine works.

I think that in each of these objectives I had a measure of success and, with one exception, all my questions were answered fully and frankly. The one exception was in the sphere of actual living conditions, for an understanding of which I wanted to go into some ordinary homes, as I had done in Poland. My suggestion that I might visit such homes was clearly unacceptable. I was left to make conjectures based upon such information as could be gleaned from odd sources. It appears that even the vast blocks of flats which have been erected in and around Moscow represent by Western European standards a low level for new accommodation.

Another indication of living standards is given by the number of members of a household who go out to work.

It seems pretty certain that the general pattern is for the wife as well as the husband to do a full day's paid work outside the home and for the grandmother to look after the children. Where there is no grandmother, the children are deposited in a nursery school or crèche. Although in the Soviet Union there are boasts about the extent to which working hours are being reduced, I think that if statistics were available it would be found that many more hours are worked per thousand of the total population in the Soviet Union than in the United Kingdom or West Germany.

The shops selling food or any article in urgent demand and in short supply, such as skis and blankets, had either long queues or such crowds that one could not get near. I was surprised at the very low standard of consumer goods, but colleagues who had been to Russia before emphasised the very great improvement in both their quantity and quality. Clothing of all kinds is expensive and of poor quality. The same is true of toilet articles. Most household goods seem to be made of metal or wood; in the one place where I saw buckets and other things made from polythene or other plastic materials the prices were very high. On the other hand, meat (including poultry), though not cheap, is not unreasonable in price and seemed of good quality, but there were no fresh vegetables on sale (we had none during the whole of our stay in Moscow) and apples and small tangerines or mandarins were the only fruit we saw.

It is difficult to make price comparisons because the exchange rate is admittedly unrealistic. Since the currency reform the rate has been 2½ roubles to the £. (Although my visit took place before the currency reform I have converted all wages and prices quoted to the new rouble: 1 new rouble = 10 old roubles.) A more realistic rate appears to be about 3½ roubles to the £.

A better way of testing prices and living standards is to see what things cost in terms of average weekly wages. It is difficult, however, to get a clear idea of how far any Soviet family's income will stretch, when many of the items which go to make up a British family's budget cannot be obtained and when, as a result of subsidies, many other expenses such as travel, rent, holidays and education are either very small or non-existent.

The lowest unskilled worker might get 30 roubles a month. At 3½ roubles to the £ this amounts to £8 10s. a month. Clearly, this would not provide a man and his wife with sufficient for the barest necessities, as food alone would cost more than this, and if both man and wife worked they would get little more than enough to keep body and soul together. Above this level incomes rise steadily and the highest I heard was 3000 roubles a month. At 3½ roubles to the £ this is over £10,000 a year; with income tax and surtax together having a maximum rate of 13%, this represents about £9000 net after tax, which is higher than almost any top salary in Britain.

A director of a factory (i.e. a factory manager) earns 270 roubles a month; this, with his bonus, makes a total of 450 roubles, upon which very little tax is payable—perhaps 25 roubles. The net income per month (at 3½ roubles to the £) is £122 or nearly £1500 a year. This is below the pay of a comparable factory manager in Britain and, if the factory director failed to earn his bonus, his net income would be uncomfortably low. Deputy directors of factories earn (with bonus) about £1000 a year; technical staff an average of about £750 a year; a very good foreman about £500 a year.

Below the rank of foreman all workers are payroll workers, and I was surprised at the very sharp distinction (comparable to British industry rather than American) between salaried staff and payroll wage-earners. A semi-skilled worker is paid about 75 roubles to which a bonus of perhaps 10 roubles is added, making about £300 a year. A good unskilled worker might earn 55 roubles and a bonus of 10 roubles, about £220 a year.

Powerful Bonus System

The system of bonuses, which in the case of salaried staff in the factories can go up to (but not exceed) 60% of salary, is a powerful weapon in the hands of the Government. Loss of bonus, or demotion, may cause hardship or acute distress. Bonuses for payroll workers are on a different basis and the allocation of the amount available depends very much on the factory manager and his immediate deputies.

My wife, who paid a visit to a secondary school, obtained figures of teachers' pay. A new teacher starts at 80 to 95 roubles a month (£230 to £270 a year); a middle range teacher would earn about £400 a year and might earn some extras for extra work. There were between 35 and 40 children in each class and with the shortage of schools a double shift is worked—one lot of children attending in the morning and another in the afternoon. The Russian driver of the car which took her to the school was full of admiration for the school and contrasted it with his own schooling, which consisted of a few lessons from an old woman in a basement, prefaced and ended with prayers lasting half an hour for the continued health of the Tsar.

I was given full and clear explanations of how the Soviet system works. The whole economy is planned financially in Moscow, the amounts to be paid out in wages and the quantities of consumer goods, capital goods and Government requirements all being quite carefully balanced in long or short period calculations. According to press reports, the Soviet Union has achieved a substantial degree of decentralisation by giving power to regional bodies called Regional Economic Councils, but it is quite clear that, given such a centralised plan, it would be impossible to give any regional council power to fix wages, prices or capital expenditure. When I visited the Leningrad People's Economic Council I found in fact that the execution of policy has been decentralised but that all major decisions of policy are still taken in Moscow. Major appointments are made from Moscow, where also the prices of consumer goods and all wage and salary rates are fixed. The capital expenditure and production targets are fixed in Moscow, although in fixing these figures account is taken of advice received from the Regional Economic Councils. The Regional Economic Councils settle appointments other than the more important ones, allocate the bonuses to staff in factories (the total amount available for bonuses being settled in Moscow), and control the performance of individuals and of factories.

Prices and Costs

The greater part of the revenue to finance Government expenditure comes from the surplus of the proceeds of goods and services sold by the State over the cost of production. Some classes of goods and services are sold at no more than cost and others actually lower than cost. Other goods and services are sold for much more than cost, and it is these classes which provide the surpluses for Government finance. Which goods should make the greatest contribution is determined on grounds of policy. For example, while motor cars are very expensive, for political reasons television sets are sold at near cost, because a television set is regarded as a necessity. Income tax is graded but does not exceed 13% on the highest incomes. It is being eliminated by stages so that it will disappear altogether by 1965.

In examining capital projects, allowance is made for depreciation and obsolescence and projects which tend to be favoured are those for which the proceeds, less the costs, will recover the whole capital expenditure within the life of the plant. If the system is worked as explained, the chemical industry is not likely to be badly planned, but I doubt whether the whole method of fixing prices in this monolithic society enables investment to be planned with quite that regard to costing and to economic factors which would be desirable.

On the technical side I found almost a worship of mechanisation and of large units regardless of the

economics, although this is not admitted. I was told that the reason is that the economies in capital and operating costs of having large units are of great importance in Soviet Russia and are not offset by such factors as having part of the plant idle owing to lack of demand. It is argued that in the Soviet Union, with its planned production, the total of the wages made available for spending on consumption goods is known and no question of idle capacity can arise. Although this is probably true for some goods at the present time, I doubt whether it is true of all goods or for goods of an intermediate character, such as chemical materials. Quite clearly there are also cases, particularly in dyestuffs manufacture, where the drive for large units, mechanisation and continuous processes can be overdone.

Drabness and Uniformity

The picture given of planned production for 200 million inhabitants, planned saving, and no unspent purchasing power must, I am sure, account for much of the drabness and uniformity and limited choice of consumer goods. Great strides have obviously been made where there is a single, simple, national objective, such as raising steel output, or putting a sputnik in orbit; but where the objective is the diffused one of finding out what people want, and trying to satisfy those wants, the system seems to be clumsy once the basic needs are satisfied. I was left wondering whether, with all the alleged wasteful competition and advertising in the Western world, a similar economic system in the Soviet Union could not have achieved better results in almost everything other than space travel and certain basic industries, such as coal mining.

Soviet achievements in sputniks are referred to constantly and with great pride. The pavilion devoted to this subject and to electronic computers in the permanent Exhibition of National Economic Achievements is elaborate and thoroughly well laid out and comprehensive, except for the notable omission of anything to do with the propellants used. The exhibition covers a very large acreage and is probably unequalled anywhere else in the world. It must be very costly and, as it is three-quarters shut during the cold weather, its cost per visitor must be enormous. It seems to be standard for all official visitors and is no doubt one of the show places used to impress people from Asia and Africa particularly. The chemical section had goods made of many well-known plastic materials but I did not see (or perhaps I did not recognise) anything particularly novel.

I gave a press conference before I left for London, which was attended by a number of Russian journalists. The questions were friendly and genuine (in the sense that they sought information and were not designed to embarrass or score propaganda points). I also appeared with my wife on television for five minutes at 9 p.m. on

the Friday evening—a peak listening period. I said just what I wanted to say, including a brief statement about ICI designed to remove some misconceptions about the ownership of the Company. I was not restricted in any way and the Russian translation was completely faithful.

With regard to trading with the Soviet Union, and for that matter with the other planned economy countries of Eastern Europe, my own view is that the more we can trade normally with these countries and the higher their standards of living rise the greater the prospects of an easing of international tension. The plans of these countries provide for exports and imports and, according to several Soviet spokesmen, will provide for imports on a long-term or virtually permanent basis where it can be shown that production abroad would be more economic than production in the Union.

In spite of the spectacular achievements with rockets, the Soviet Union is still a long way behind the Western world in productive efficiency and in the quality of consumer goods. I have recently visited Rumania, Poland and Czechoslovakia, as well as the Soviet Union, and in all four countries there is frank admission of this inferiority in these fields. Export competition from them on the basis of economic costs is not to be feared for many years, if at all. Competition of an unfair character, that is to say the export of goods much below the cost of production, is bound to take place for some goods but I believe that this will be limited, and although it may from time to time be hurtful to some producers, it will not be a major factor in world trade.

More Iron Curtain Trade

ICI sales to the Communist countries are ten times what they were five years ago. The main increases have been in plastics, dyestuffs, synthetic fibres, and some of the newer heavy organic chemicals, all of which go into the making of a variety of goods which put up the standards of living of ordinary people in these countries. In addition to sales of chemicals there have been further sales of know-how for making these products. In ICI we do not subscribe to the view that this kind of transaction is to be avoided, either because it saves the Russians the trouble of finding out for themselves or because it might undermine future sales. It would be as unrealistic to expect the Soviet Union to go on for ever buying its requirements of these more sophisticated products as it would be to expect it not to make the bulk of its own requirements of basic chemicals; but this kind of development of the Soviet chemical industry will itself generate further opportunities for trade just as it does between all highly developed industrial countries.

The present emphasis in the Soviet Union on improving living standards is bound to mean increased consumption of goods of all kinds, and I regard the prospects for future trade as very encouraging.

June IN THE GARDEN

CONTROLLING WEEDS

By PERCY THROWER

ONE of the less interesting gardening subjects is weeds, and weeding is usually an uninteresting and tiresome task, but one which affects everyone with a garden. At this time of year weeds, like everything else in the garden, are growing fast and it is difficult to control them.

I think it best if I deal with the garden paths first, because nothing will spoil the appearance of a garden more than a weedy, untidy path. The path may be a crazy-paving one, one constructed of gravel or tarmacadam, or one made with ashes. It is only on a crazy-paving path that plants may be growing; small, low-growing alpine between the crevices, so the best way of keeping down the weeds is to use a weedkiller of one kind or another. Care must be taken with a crazy-paving path not to put the weedkiller anywhere near the small plants. As a long term policy it is far better to cement in the crevices of a path such as this, leaving only those places where plants are to be grown.

It may be thought impossible for weeds to grow on a tarmacadam path, but this is not so; dandelions in particular, and sometimes docks, as well as some other perennial weeds, are powerful enough to push their way up through the tarmacadam covering. There are various kinds of weedkillers which are safe to use and harmless to animals and birds, such as sodium chlorate; even common agricultural salt is very effective. Some weed-

killers are of course more lasting than others and those which are effective for six or more months are, I think, the best to buy. Sodium chlorate used at the rate of four ounces to a gallon of water is deadly to weeds and lasting; two gallons is enough for about three square yards of path. The important point to bear in mind when using this and other weedkillers is that they are fatal to all kinds of plant life, therefore they must not be allowed to come into contact with plant roots or the roots of trees. It is very necessary too that they are not sprayed on to the edges of the lawn because the grass would be killed as well and that would spoil the appearance of the lawn. If common salt is used this must be sprinkled liberally along the path on top of the weeds and not diluted in water.

WEEDS on the lawn are a problem, too, but it is much easier these days to control weeds which grow with the grass. There are the selective weedkillers of various kinds which, when sprayed on the lawn, will kill the weeds and leave the grass unharmed. If both grass and weeds are growing fast the selective weedkillers are more effective against daisies, dandelions, plantains, and many other weeds. It is by far the best to use a good all-purpose fertilizer about three weeks before using the selective weedkiller, the grass and weeds will by then be making rapid growth. The lawn should not be mown for

at least four or five days before spraying on the selective weedkiller, nor for the same period afterwards. The weeds absorb the selective weedkiller through their leaves; if mowing is done the leaf area is reduced and a lot of the effectiveness of the weedkiller will be lost. These must be used according to the makers' instructions and care must be taken not to spray them on to other plants, and all watering cans and buckets must be thoroughly washed out.

THE selective weedkillers which have to be diluted in water can be effectively used against perennial weeds in other parts of the garden. They must be diluted as instructed for use on the lawn and must be applied to the individual weeds, and must not be sprayed on to plants or vegetables of any kind. The value of this way of treating deep-rooted weeds is that the chemical is taken down to the root and kills that as well as the leaves.

The annual weeds such as chickweed, groundsel, annual grass and others are best controlled by the continual use of the dutch hoe. The secret of keeping the garden free of these is to hoe them off before they begin to produce their flowers and seeds, once they are allowed to seed the seeds will remain in the soil for years, and one must bear in mind that many of these begin to flower when they are very small. There is a very true saying, "One year's seed, seven years' weed," and how true that is.

NEWS IN PICTURES

Home and Overseas



New research laboratories. Paints Division's new research laboratories designed by P. P. Bennett & Sons. *Above:* The main entrance on the north side of the laboratory block, showing the library reading room on the left, seen over a fountain in the forecourt. *Left:* A general view of one of the organic chemical laboratories



Wembley début. Sam Skelton, 23-year-old 'Terylene' drawtwist operator at Wilton Works, played inside-left for West Auckland in the FA Amateur Cup Final at Wembley on 22nd April. Here Skelton (No. 10) leaps high to beat the Walthamstow centre-half and right-back in a duel for the ball during a goalmouth incident



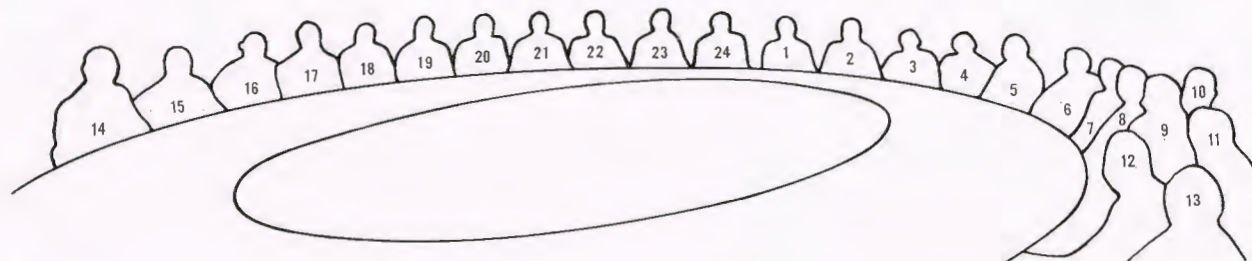
Dutch visitors see Wilton. Some of a party from Holland who visited Wilton at the Company's invitation to see for themselves what sort of development to expect at ICI's new Rotterdam site. Mr. F. Posthuma of the Rotterdam Port Authority is fifth from the left and Burgomaster J. C. Aschoff second from the right. ICI men are Mr. B. R. Goodfellow (*extreme left*), Mr. J. C. H. McEntee (*fourth from the right*) and Dr. S. B. Cormack (*extreme right*). (See page 190)



Safety Cup. Mr. S. P. Chambers (*right*) presents the ICI Inter-Division Safety Trophy to Mr. E. J. Callard, chairman of Paints Division, during Central Council at Scarborough last month. Paints Division and ICI (Hyde) won the cup outright for the period ending 31st December 1960 after tying top with General Chemicals Division the previous June



The Board in session. A special photograph of the ICI Main Board taken for the *The Times* Review of ICI by one of their staff photographers. (See story on page 190)



- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Mr. S. P. Chambers (Chairman) 2. Mr. E. A. Bingen (a Deputy Chairman) 3. Mr. L. H. Williams (a Deputy Chairman) 4. Mr. D. J. Robarts (non-executive) 5. Lord Chandos (non-executive) 6. Lord Amory (non-executive) 7. Mr. R. A. Banks (Billingham, Nobel, Wilton and Severnside Group) 8. Mr. C. Paine (Fibres, Heavy Organic Chemicals and Plastics Group) 9. Mr. P. T. Menzies (Finance) 10. Dr. J. Ferguson (Research and Development) 11. Dr. J. S. Gourlay (Alkali and General Chemicals Group) 12. Dr. A. Caress (Overseas) 13. Mr. H. Smith (Technical) | <ol style="list-style-type: none"> 14. Mr. M. J. S. Clapham (Overseas) 15. Mr. G. K. Hampshire (Dyestuffs, Paints and Pharmaceuticals Group) 16. Mr. C. M. Wright (Personnel) 17. Dr. R. Beeching (immediate past Technical Director, released from ICI for five years when he became chairman of the British Transport Commission at the beginning of the month) 18. Mr. W. D. Scott (Commercial) 19. Dr. J. Taylor (Metals Group) 20. Mr. R. C. Todhunter (Overseas) 21. Lord Slim (non-executive) 22. Mr. S. F. Burman (non-executive) 23. Lord Glenconner (non-executive) 24. Dr. R. Holroyd (a Deputy Chairman) |
|---|---|



Top apprentices. Two ICI boys reached the regional round of the National Apprentice of the Year competition run by the Birmingham Chamber of Commerce. David Greatrex (*right*), who recently finished his fitter/machinist apprenticeship with Metals Division, was one of three apprentices chosen to represent Birmingham in the Midland Region contest. David Temke, now a draughtsman with HOC Division, was selected as Tees-side's top craft apprentice and competed in the North of England and Scotland Regional Selection Board



Non-woven 'Terylene' bags are being used by the Forestry Commission for the controlled pollination of pine and larch trees. Here 7-year-old larch trees at the Commission's Alice Holt Lodge Research Station in Surrey are under protection awaiting pollination. 'Terylene' bags stand up to the weather far better than the paper ones previously used



Twelve keen gardeners who had never been to Chelsea Flower Show realised their ambition on Fellows' Day on 16th May. They were winners of gardening competitions held in various British cities this spring in connection with lectures by Mr. Percy Thrower, the TV gardener, sponsored by Plant Protection Ltd., who market ICI garden products. Each prize was a trip for two to Chelsea with all expenses paid. Here they all are with Mr. Thrower on PPL's stand



ICI in Cambodia. Pharmaceuticals Division was represented at the recent National Agricultural Exhibition in Cambodia. Our picture, supplied by our agents Messrs. Denis Frères, shows the Queen of Cambodia on the stand accompanied by Monsieur Sihanouk. Other distinguished visitors included ex-King Leopold of Belgium and the Princess de Rethy



Darlene Hard of the USA

LAWN TENNIS — *this year can shape the future*

By Denzil Batchelor

Should professional tennis players be allowed to compete in official championships? "Yes," writes Denzil Batchelor in a frank discussion of a question which is to be faced by the International Federation this year. But he thinks it will be at least another year before there is even as much as a firm promise of an open Wimbledon.

FOR lawn tennis this is the year of destiny. Last July, to the astonishment of all "in the know," the International Federation in Paris rejected a proposal to open official championships to professional players. A two-thirds majority was needed, and the motion was defeated by the narrow margin of five votes. It should be mentioned that the resolution was put to the vote after a three-hour lunch; moreover rumour has it that one delegate failed to cast her vote in favour because she was out of the room at the time arranging a boating trip; another supporting delegate

had retired for more personal reasons, while a third was sleeping too peacefully to be woken in time to vote.

That was last year, when everybody supposed that open tournaments were just around the corner. Vastly different is the outlook today. A year ago not only Britain and America but also Australia and France supported the plea for open tournaments. On 9th March 1961, the Lawn Tennis Association returned gallantly to the attack, passing by an overwhelming majority the resolution to be submitted to the International Federation: "That, as an experiment, the

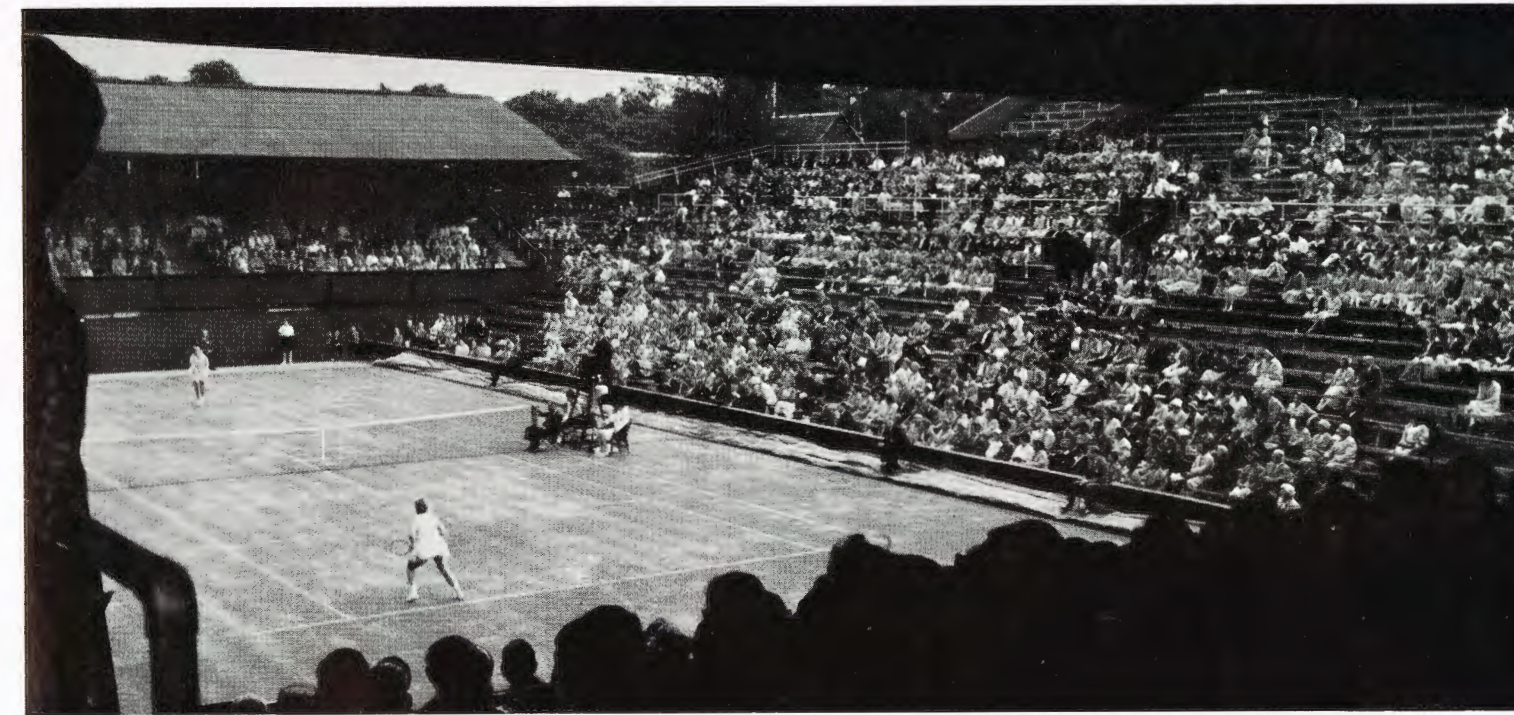
Championships and other official championships if desired, be allowed to accept entries from professionals as well as amateurs in 1962."

A year ago it was the smaller nations which brought about the defeat of that similar resolution. But this year it is known that Australia, with twelve votes, and France, also with twelve, supporters of that resolution, have changed their minds and will oppose our motion. Inter-state rivalries and a clash of personalities partly explain the Australian defection, but there are those who believe that both countries fear the autocratic influence of Jack Kramer, czar of professional tennis, whose circus of some dozen players—the best in the world, be it added—take more money out of the game than all the amateur tournaments put together.

With the loss of French and Australian support and

with possible opposition from the Scandinavian countries and Italy, the open tournament seems further away than ever. There remains, however, a slim hope. In 1962 the committee convened to study the whole question of amateurism in lawn tennis makes its report. It is believed (at least by optimists) that no conscientious body which has set itself to understand the anomalies of amateurism can fail to make recommendations from which the distinction between paid and unpaid is, as in table tennis, stricken from the records for ever.

It is high time this happened; but it is also high time the general public caught up with the situation as it has developed in lawn tennis today. There is a sort of hazy universal belief that amateur tennis players never had it so good. This view is five years out of



Wimbledon, mecca of the amateur tennis-playing world

date; it belongs to the early post-war era when an Italian player, asked to represent his country in the rigidly amateur Davis Cup, replied by letter that his price for doing so was a good many thousand lire. (He was prevailed upon to send a telegram accepting unconditionally and asking that his letter should be destroyed unread, but the letter arrived first and he was suspended indefinitely, to be awarded forgiveness and reinstatement on his marriage—a charming wedding present.)

Unlawful Subsidies

The deep-seated cynical belief in the heavily subsidised comfort of the amateur status was recently bolstered by the reported statements of Earl Buckholz and Barry Mackay. Both were reported as having repented after living for years on unlawful subsidies. Said Buckholz, "All our lives we were taught honesty. It gives us a dirty feeling to take money under the table as amateurs." Their alleged statements were given universal publicity. What was less widely publicised was the fact that both players later declared that they had been misreported and denied many of the statements attributed to them.

In fact, undercover payment of amateur lawn tennis players is almost non-existent in the United States. The countries where the amateur does best, if not for himself at least for his bank balance, are certain European countries; and even there, things aren't what they used to be. A year or so ago the tennis-playing countries pledged themselves to put their house in order, and they have done their best to keep their word. *There is less money to be made in amateur tennis this year than there has ever been since "shamateurism" became a household word.* Those who urge the necessity for open tournaments on the grounds that there is no difference between amateurs and professionals are a little out of date. Open tournaments are needed for the game's sake, and because it is ridiculous to pretend that any harm comes of allowing paid and unpaid players to meet in competition, as they do in golf; but that must not blind us to the fact that there remain plenty of unpaid players in the game, particularly in America.

To sum up; it is likely, but not certain, that we shall have to wait at least another year before we get even as much as a firm promise of an open Wimbledon in the future.

If I may add a rider, it is that what is wanted is that the professional game should bring itself up to date.

At present, it is virtually restricted to one major league of about a dozen players; admittedly the world's best. There is no room in it for the middle class player whom the public would pay to see as it at present pays to see minor amateurs in action from Beckenham to Wellingborough. George Worthington, our Davis Cup coach, recently said to me almost wistfully, "I don't think the sight of professionals playing would do any harm. We get tournaments on the Continent. I played in one excellently run, sponsored by Vichy Water, who offered a vast sum in prize money. I'm afraid Wimbledon would never agree to that." He is quite correct—but Beckenham and Wellingborough might.

The season upon us, apart from having its chance to make history on a major issue, offers rather more interest than most. There never was a more open Wimbledon—with this proviso; that some Australian or other seems certain to win it. Early in the season there were doubts about Neale Fraser's fitness, and as early as Bournemouth and Hurlingham, Rod Laver seemed palpably stale. After the Hard Court Championship, Billy Knight said to me of Roy Emerson, Australian champion, but ranked only third at home, "He is the complete, dedicated player." It is this quality—the ability to remain at his peak psychologically and physically for a testing fortnight—that leads me to believe he will win at Wimbledon.

Pietrangeli is perhaps his nearest rival, outside the Australian contingent; but he never seems as good in the second week of the fortnight as he is in the first. Our own Bobby Wilson is a possible long shot. He is good enough to beat anybody, but not everybody.

The American Challenge

The American challenge is weak. Mackay and Buckholz, their first and third players, have become professionals, while Bartzen their second ranked player is a mere base-line pastmaster, supreme, if at all, on clay courts. Young "Chuck" McKinley is the most experienced man on grass. He was suspended for some time for his behaviour in the Inter-zone Cup final against Italy. He told the referee, "You don't know the rules," to meet with the retort, "I know one rule, the rule of good sportsmanship, which you do not know."

Among the women, Miss Lehane and Miss Smith of Australia should be the most interesting challengers, determined to win for the first time a pre-eminence

for their country long enjoyed by the other sex. But the United States will marshal what might not unfairly be called a monstrous regiment of women. If anyone can beat Miss Bueno at Wimbledon it must be Darlene Hard, a tested veteran who, it seems impossible to realise, is only twenty-four. Behind her in the national ranking list come Karen Hantze, Nancy Richey, Billie Jean Moffitt (risen from nineteenth place to fourth) and Donna Floyd (up from eleventh to fifth)—every one of whom is under twenty. It's a poor look-out for our chances in the Wightman Cup, which I fear we shall kiss goodbye for some years to come.

Davis Cup Prospects

In the Davis Cup we should meet and beat Austria and then South Africa, to reach the semi-final for the sixth year in succession—probably against Sweden. This may be the end of our advance—Lundquist and Schmidt are a formidable pair—and even if we beat them we can have few hopes in the final in which we may expect to meet Italy once again.

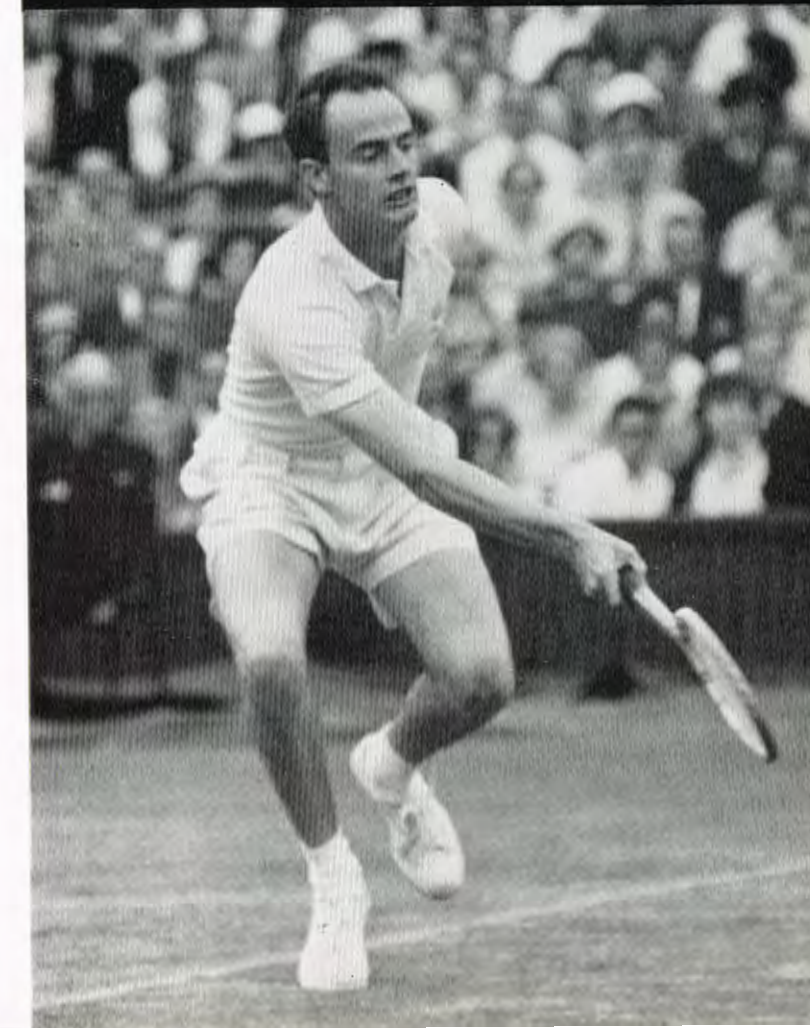
Our horizon is by no means overcast however. A. R. Mills's doggedness is now earning him a place in the sun, and we have in Sangster and Matthews youngsters of whom we expect as much today as we did of Wilson and Knight eight or ten years ago.

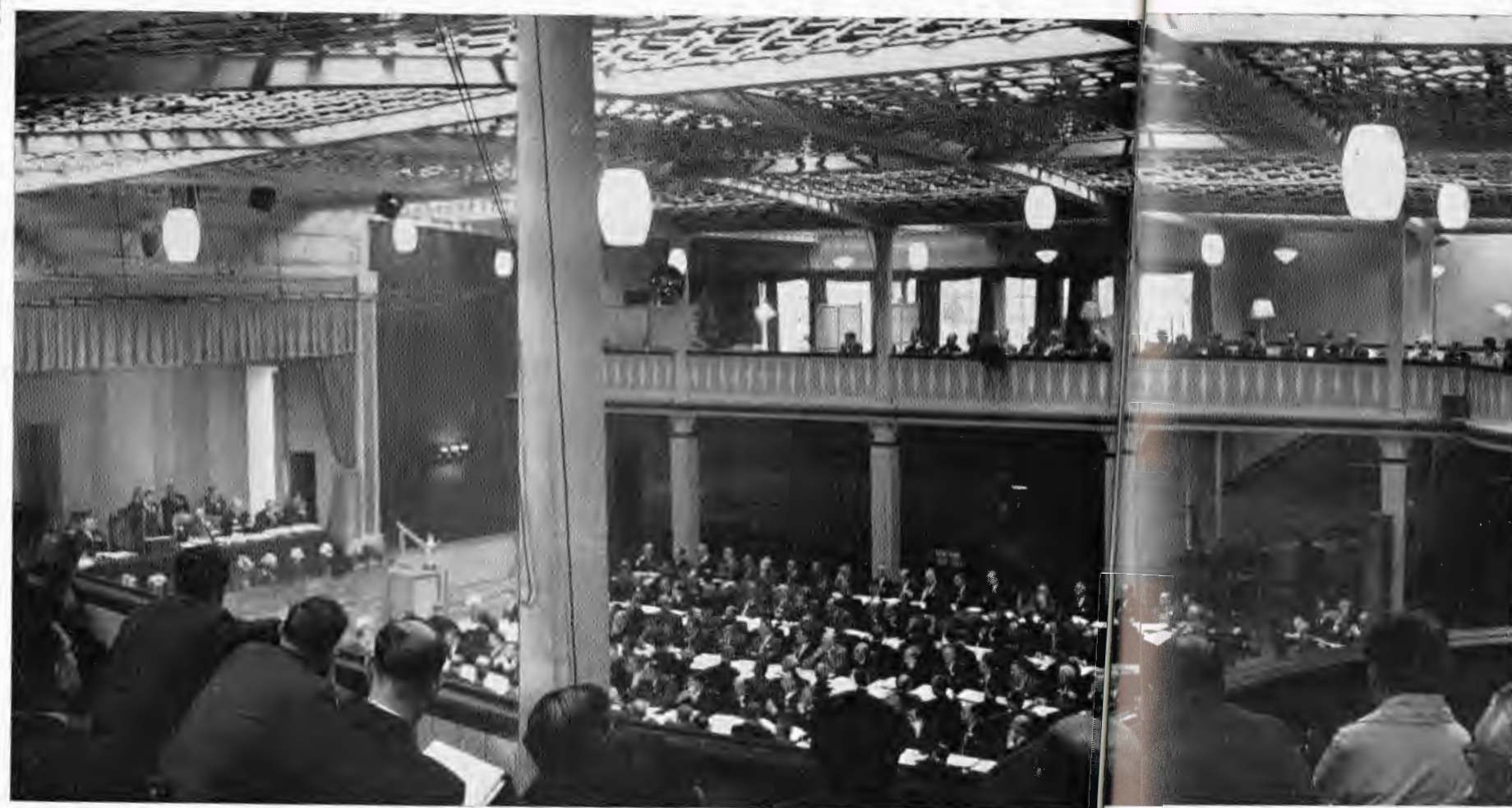
Finally, it depresses me to record that there is no sign of any tactical development in the game. No one since G. L. Rogers of Ireland has tried using an outsize racket. (If it comes to that, no one since N. Misu of Rumania has served with his back to the net, though that, I fear, was played for laughs.) I have one match-winning suggestion to make to those possessed of power-services. First services are the match-winning weapon in lawn tennis: second services are invariably in second gear, put over the net to start rallies. If you are a champion you should train yourself to follow up your first thunderbolt (if a fault) with a second, thus making sure of never losing a service game. On top of this a wise strategist shouldn't waste energy trying to capture every one of his opponent's service games. In any set he should win one—and "throw" the rest.

Tactics of this sort could ensure victory in a crucial match. On the other hand they might make lawn tennis even more mechanical and duller than it is; so perhaps it's as well that great players can't be persuaded to play more with their heads and less with their physical attributes.



ABOVE: Karen Hantze (U.S.A.), high in the national ranking list, is sure to provide strong competition at Wimbledon this year. BELOW: Bobby Wilson of England is a possible long shot to win the men's singles.





Central Council at Scarborough

By the Editor

It was an alive but not lively meeting—alive because the issues at stake were of some importance and because what happened at Council could influence the course of events. The burning issue was whether there should be a referendum among payroll workers on the question of the Company contracting out of the State Pension Scheme. The actual resolution before Council was one asking the Board to hold this referendum. It was moved by **Mr. Mason** of Wilton, who argued that ICI pensioners were at least adequately provided for. He had yet to hear anyone disagree with the assertion that the ICI scheme was better than the State graduated scheme.

"What is the point," he said, "of providing for the future if it means foregoing present necessities? Ten per cent of our wages for pensions is too large and our pay-packets will not stand the strain." The payroll felt that they had been forced into the scheme. As this was a matter which affected the payroll, it was the payroll who should decide.

Opposition to this resolution was led by **Mr. Hutton** of Billingham, chairman of the Workers' Representatives. His basic theme was that the very referendum was a reflection upon the machinery of joint consultation. It was just such a situation as this that the machinery was devised for. Why, therefore, appeal over the heads of councillors back to their constituents? What was really needed was more time for everybody to get to understand the State scheme and its implications. With this other speakers joined issue. **Mr. Silcock** of General Chemicals revealed that an enquiry at Rocksavage Works had shown 95% of the payroll in favour of contracting out; and **Mr. Rose**, also of General Chemicals, spoke of the payroll at his Works as being 100% against participation.

Altogether, 13 people came to the microphone to speak on the referendum issue before **Mr. Grint**, Chief Labour Officer, intervened to make a statement of the Company's point of view. It might, he said, appear democratic to ask 60,000 people to fill in a form, but this would only be of value if the result was going to help in reaching the right decision; and it was felt that there might be more confusion than help.

The Pension Fund was something in which there was a degree of mutuality in which to some extent the stronger and more fortunate helped the less fortunate. The mere

Cash flow for sixteen years 1945-1960

Cash was obtained from :

1 Sources within the Company	
Income retained for employment in the business	145 million
Depreciation	208
Temporary use of tax reserves	40
Miscellaneous capital receipts	18
	<u>411</u>
2 Sources outside the Company	
New ordinary stock	59
Unsecured Loan Stocks	68
	<u>538 million</u>

Cash was used for :

1 New manufacturing plants, additions and alterations to existing units	
	437
2 Additional stocks and other increases in working capital	40
3 New investments in subsidiaries and associated companies	61
	<u>538 million</u>

In an address to Central Council on the ICI accounts, Mr. Peter Menzies, ICI Finance Director, gave the figures of ICI's capital spending since the war. This totals the huge sum of £538 million, of which as much as £411 million was found from cash available within the company.

sum of individual views did not always represent what was in the interests of the greatest number. The Company's view was that they had a system of joint consultation in order to get a consensus of views on difficult matters. If that were to be thrown overboard and they were to have resort to a referendum, it would in some measure be a reflection on their ability, as joint consultants.

This statement prepared the ground for an amendment proposed by **Mr. Lewis** of Billingham which, in effect, asked that the referendum issue be shelved for second thoughts. The wording of this resolution was "that the Company should allow Councillors the opportunity fully to inform their constituents of the implications of the Scheme before the question of a referendum is decided." **Mr. Hutton** supported this resolution, and put to the vote it was carried by a majority of almost two to one. The Chairman then indicated that the Board would instruct Divisions to see that the resolution was implemented.

This debate followed closely on the Chairman's opening address—an address more than usually packed with interesting information. Part of it was devoted to a short review of the Company's expansion plans. The Chairman made the rather startling point that Billingham's decision to erect a new plant to produce synthesis gas for the manu-

facture of ammonia using oil as the raw material instead of coal was not determined by the rising cost of coal. "In fact," said the Chairman, "the new process is so much more efficient that it would be cheaper for us to adopt it starting from oil even if the Coal Board gave us coal for nothing."

Big Expansion Plans

Reviewing further the Company's development plans, the Chairman revealed that already in the four months of 1961, capital expenditure had been authorised which exceeded the total of capital expenditure authorised for the whole of 1960—namely £40 million. Turning to our decision to set up a manufacturing site at Rotterdam—so to speak a Wilton in Holland—the Chairman made the interesting remark that this decision did not rest on whether or not Britain joined the Common Market. The Company had reached the conclusion that manufacture in Holland would be a sound proposition whatever happened to the Common Market or the Free Trade Area. "It is not a question," he said, "of deciding to manufacture in Holland instead of in Britain; the decision is to manufacture in Holland as well as in Britain, and we are confident that from Holland we can capture markets which would not be reached by products from Britain."

Finally, the Chairman had a few words to say about his recent visit to Russia. He told the story of how, having explained that the total capital value of ICI's assets throughout the world amounted to about £800 million, he was asked on no less than three occasions whether it was true that he personally owned more than half of this total. "On learning the truth I am afraid my questioners were rather disappointed," said the Chairman amid laughter.

Pension Increases

The Chairman's address paved the way for an announcement by **Mr. C. M. Wright**, Personnel Director, concerning increases in workers' pensions. He disclosed that an actuarial surplus of £9.7 million had been revealed by the valuation done at 31st March last year. This tremendous figure had been made possible by successful, not to say brilliant, management of the funds.

The meeting then went on to deal with a number of more routine matters. There was the usual crop of items concerning retirement gifts and long service awards. In rejecting the resolution which sought to change the rules of retirement gifts, the Personnel Director stressed that no set of rules could avoid hardship at borderline cases. If, to meet particular circumstances in one scheme, they agreed to alter the border or relax the qualification, they did not remove the apparent injustice, they merely moved it to another point. Strict adherence to qualifying conditions was essential. Later, **Mr. Wright** reminded Council that since the war Central Council had had no fewer than 22 motions on long service awards and ten changes had actually been introduced. Nevertheless it appeared that there was still dissatisfaction. With a view to reaching stability, the Board had decided to set up a



Mr. T.J.R. Davison of Billingham Division, Mr. N.J. Freeman, Managing Director of IC Insurance Ltd. and Mr. A.R. Allardyce of Billingham Division



Mr. G.R. Barr and Mr. H. Watkin of Alkali Division



Mr. D.K. Peacock, Billingham Division



Mr. H. Tranter of Billingham Division, Mr. E.B. Wilson, Mr. A.N. Connolly, Mr. W. Wright of Wilton Works and Mr. H. Rawlinson of Billingham Division



Mr. D. O'Leary of Metals Division



Mr. R.R. Robinson of General Chemicals Division



Mr. S. P. Chambers, Chairman of ICI, and Mr. E. Hutton, Chairman of the Workers' Representatives



Delegates returning to the meeting after lunch.



Dr. R. W. Riding and Mr. I. T. Pierce of General Chemicals Division.

small committee to review the whole question. The committee was to consist of two worker representatives, two staff representatives, a representative from Central Labour Department who was to take the chair, a representative from Central Staff Department to act as secretary, and a representative from Central Purchasing Department to give technical advice.

That hardy annual, reform of the Staff Grade Scheme, then made its appearance. First of all, **Mr. Grint**, chief labour officer, announced that the Board had accepted the Central Council resolution asking that all workers should be eligible for promotion to Staff Grade on completion of three years' service with the Company, regardless of age. Management, he said, was satisfied that the behaviour of the young people concerned during the qualifying period justified this additional trust being placed in them. Later, **Mr. Goodsell** of Wilton moved a controversial motion asking that there should be a special Staff Grade status open to members of the Staff Grade Scheme who, over a period of five years or more, "had shown a responsible attitude to this privilege." He proposed that this special status should include the privileges of payment . . . of average earnings while sick and of payment on a monthly basis if desired and of non-clocking—in other words, closer integration with ordinary staff conditions. There was quite a lively debate upon this motion, which was only withdrawn after an amendment moved by **Mr. Hutton** of Billingham. This was to the effect that Council should await the recommendations of a Billingham sub-committee now discussing the matter. The amendment was carried.

Rest Homes Proposal

Two other matters deserve special mention. First, the motion asking that the Company should "examine the practicability of providing homes for rest and recuperation for use by workers of all classes on the recommendation of the Works doctor." This clearly commanded support and was quickly carried. Second, the motion that the Company should be asked to consider giving pensioners "controlled opportunity" of buying ICI paint at a discount. This led to an intervention by **Mr. Callard**, chairman of Paints Division. He disclosed that the Company had 13,000 wholesalers and retailers handling Paints Division business. All of them needed certain minimum margins if they were to run their businesses satisfactorily. Retailers' margins, however, were tending to get smaller because of increasing costs. Any pressure on these retailers to give special discounts would therefore reduce their profits still further and would not improve relations with ICI. Ten per cent discount for pensioners, it had been calculated, would benefit the average pensioner to the extent of only 7s. 7d. per year. It hardly seemed right that the Division should be asked to make a complicated modification in their selling policy for so small a benefit.

In spite of this devastating analysis the motion was carried, but with 73 votes against. In accordance with standing orders, it was referred back to Divisions for further consideration.



Mr. V. R. Goodsell of Wilton Works



Mr. G. Lambert (left) and Mr. A. E. Ashley of General Chemicals Division



Mr. W. McKenzie, Safety Officer of ICI at Hyde.



Mr. J. Grange Moore, Mr. C. Hunter and Mr. F. B. Wilson of Wilton Works



Mr. G. O. Hart, Mr. J. F. D. Bird and Mr. J. Drury of Wilton Works



Mr. W. E. Leach of Paints Division (Smethwick Works) and Mr. W. V. Corne (Slough Works)



A Yacht for Everyman?

the "Flying Dutchman" could be the answer

By Desmond Haslett

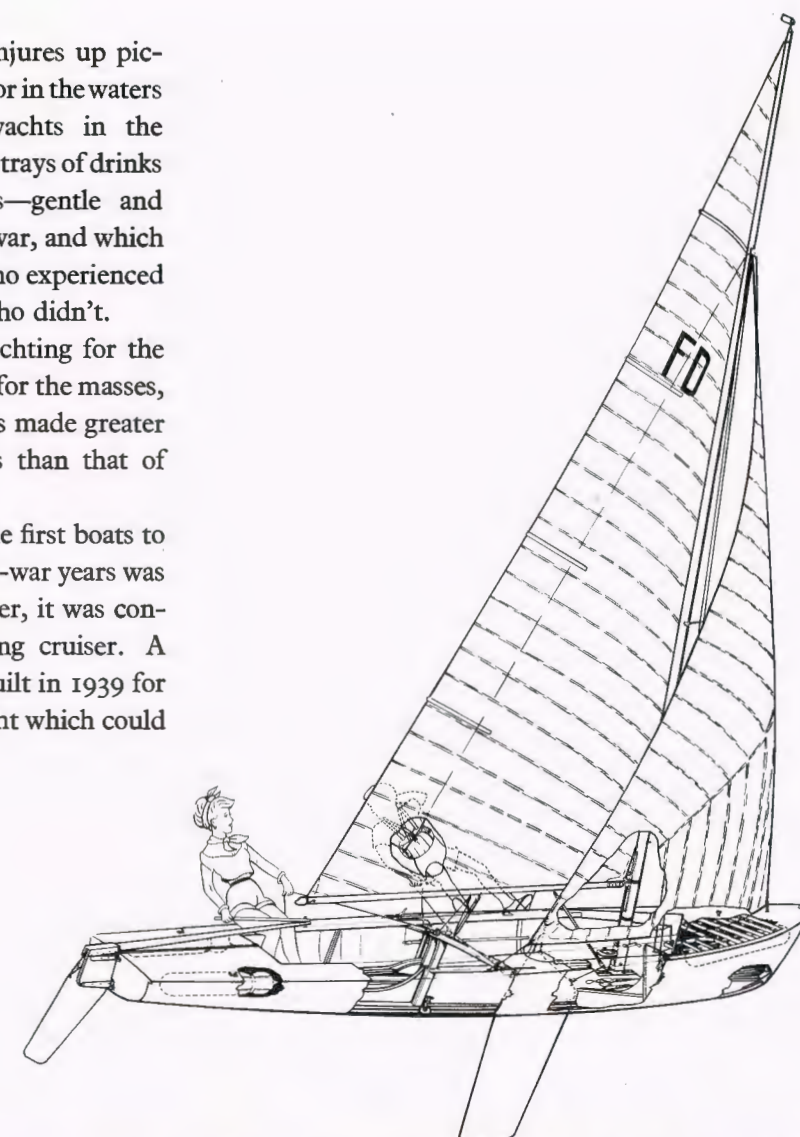
Photographs by L. J. Bal, ICI (Holland)

With the growing popularity of sailing the need has arisen for a craft between the dinghy and the Dragon. Such a boat could be the Flying Dutchman, really fast on and off wind, safe, and costing £250 if you do it yourself

FOR a few people, yachting still conjures up pictures of the J class racing off Cowes or in the waters of the Clyde—graceful steam yachts in the anchorage—white-coated stewards with trays of drinks—scrubbed teak and gleaming brass—gentle and leisurely days that ended with Hitler's war, and which live on only in the memories of those who experienced them or in the imaginations of those who didn't.

If that was the end of the era of yachting for the few, it was also the beginning of sailing for the masses, and in the last fifteen years no sport has made greater strides in terms of active participants than that of "messaging about in boats."

Although a pre-war design, one of the first boats to gain international popularity in the post-war years was the Dragon. Designed by Johann Anker, it was conceived as the small man's cheap racing cruiser. A Dragon complete with sails could be built in 1939 for as little as £275. For this you got a yacht which could



A stripped weight of 275 lb. makes transport of the Flying Dutchman easy





A camping holiday with the Dutchman as travelling companion

race in international contests and which had a cabin and berths that provided very adequate cruising conditions for two (some even had built-in cocktail cabinets). But the modern Dragon has become a racing machine, and with the refinements which the tolerance in the class rules allows and with the increase in labour and material costs, a new boat today is between £1000 and £1400, putting it beyond the reach of most would-be sailors. This, alas, is all too typical of what has happened to so many "cheap" boats.

At the lower end of the scale, the post-war years have produced a plethora of national and international one-design dinghies—the GP 14-footer, the Enterprise, the Cadet, the Day Boat, the Jollyboat, the Osprey, the exciting Hornet and Firefly, and a host of others. All have their adherents, but most have either demanded a fair degree of skill to sail them or they have lacked the speed and excitement which become so important with increased skill, and in some cases the safety factor left doubts as to their suitability for the inexperienced.

There has seemed to be a need for some type of craft which would appeal both to the beginner and to those who have acquired a high degree of skill—a boat which is really fast on and off wind and which yet has a sufficiently good safety factor to allay the fears of anxious parents. It is difficult to satisfy these requirements and even more difficult to satisfy them cheaply, but one of the most interesting and practical small boats which seems to come near to meeting the need is the International Flying Dutchman.

The Flying Dutchman was selected as the two-man boat for the 1960 Olympic Games, and has again been chosen for the Games in 1964. The boat was designed by a group of Dutchmen, prominent among whom was U. van Essen, who is well known in international sailing circles. It could perhaps be fairly described as a cross between the small British dinghy and the long, narrow European "Jolle."

With an overall length of 19 ft. 10 in. and a beam of 5 ft. 11 in., it has a stripped weight of only 275 lb., making it possible to transport it on a roof cradle on a standard car. When the drop keel is down the draft is



When, like all small boats, it does capsize, the cockpit coaming remains well clear of the water, leaving the inside of the boat dry on righting

3 ft. 8 in., but with the keel up the boat draws only a few inches, making it easy to beach and to push off from mudbanks without the crew getting wet beyond the ankles.

The Dutchman has a mainsail of 100 sq. ft., a large Genoa of 84 sq. ft., a small Genoa of 60 sq. ft. and a spinnaker of 190 sq. ft.

It has an excellent initial stability, and when, like all small boats, it does capsize, the cockpit coaming remains well clear of the water, leaving the inside of the boat dry on righting.

The maximum theoretical speed of any hull is a factor of the waterline length, but if a boat can be made to plane the rule no longer applies, and the Flying Dutchman is the only single-hulled boat which can be made to plane to windward—that is, sailing as close to the direction of the wind as possible.

No boat worth calling a boat is cheap to buy, but for what it offers the Dutchman is not expensive. If you must buy the complete, ready-made article, you will pay about £450 in this country. Even allowing for



ABOVE: Anchored for the night
BELOW: Cruising with the inboard motor

duty and freight, you might do it a little more cheaply by buying from a Dutch or Norwegian yard, but if you are prepared to get down to it yourself you can buy the "shell" in this country for about £110. Allow another £100 for sails and £40 for drawings, constructional manual and fittings, and you can be a proud man for £250. One of the interesting features of the class is that in recent international contests some of the most successful boats have been those which cost least and were most free from expensive gadgets.

If you want to own a boat which you can use for picnic sailing and (with a tent rigged over the cockpit) for cruising, in which you can let loose your son or daughter with every confidence that you will see

them again, which you can carry around on your car, which will give as much fun to the expert as to the tyro, which you can race in national and international contests and which will not force you into bankruptcy, the Flying Dutchman is worth looking at.



"Village Cricket"

Photo by P. Sandilands (formerly of Paints Division)